



Corres. and Mail  
**BOX AF**

**PATENT APPLICATION**

RESPONSE UNDER 37 CFR §1.116

EXPEDITED PROCEDURE

TECHNOLOGY CENTER ART UNIT 2653

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Tsutomu ISHII et al.

Application No.: 09/181,809

Filed: October 29, 1998

Group Art Unit: 2653

Examiner: K. Chu

Docket No.: 101327

For: APPARATUS AND METHOD TO PHOTOISOMERIZE A RECORDING LAYER  
WITH A POLARIZING ROTARY DEVICE (AS AMENDED)

**REQUEST FOR RECONSIDERATION**

**RECEIVED**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

FEB 13 2004

Technology Center 2600

Sir:

In reply to the November 13, 2003 Office Action, reconsideration of the rejections is respectfully requested in light of the following remarks.

Claims 1-61 are pending.

**Rejection Under 35 U.S.C. §102(b)**

The Office Action rejects claims 30-34 under 35 U.S.C. §102(b) over U.S. Patent 4,551,819 to Michl et al. ("Michl"). Applicants respectfully traverse the rejection.

Michl does not disclose each and every element of claim 30. Claim 30 recites "[a]n optical recording apparatus comprising: a light source that generates recording light; a spatial optical modulator that controllably rotates a polarization angle of said recording light; and a focusing optical system that performs multilevel modulation of an azimuth of an optical recording layer within an optical recording medium by directing the recording light obtained

through the spatial optical modulator to the optical recording medium" (emphasis added).

Michl does not anticipate such an apparatus.

The Office Action asserts that Michl teaches an optical recording apparatus having all of the elements of claim 30. In particular, the Office Action asserts that Michl discloses a light source that generates a recording light (FIG. 9), and a spatial modulator 19 that controllably rotates a polarization angle of the recording light (FIGS. 5 and 6; column 2, lines 6-14; column 6, lines 39-41). Notwithstanding these assertions, nowhere does Michl disclose a spatial optical modulator that controllably rotates a polarization angle of a recording light, as recited in claim 30.

The purported disclosure of a light source that generates a recording light (FIG. 9) is not a recording light source, but rather a reading light source. Columns 12-15 of Michl, including the description of FIG. 9 at column 13, line 65 to column 14, line 15, are plainly referring to an apparatus for reading information that has been recorded on a recording medium, not recording such information. Similarly, the purported disclosure of a spatial modulator that controllably rotates a polarization angle of light, refers to the process of reading and not recording. The cited passage at column 2, lines 6-14 refers to a light beam modulator, but does not disclose what property of emitted light is being modulated, much less that the polarization angle of emitted light is being modulated. FIGS. 5 and 6 and the description thereof at column 6, lines 39-41, like FIG. 9, refer to a light source used in reading information, not recording information. Nowhere does Michl disclose a spatial optical modulator that controllably rotates a polarization angle of a recording light as required in the claimed invention.

Michl's teachings regarding recording or "writing" on a recording medium conspicuously lack any disclosure regarding the modulation of the polarization angle of a recording light. The only characteristics of the recording light in Michl that are varied are

pulse length and intensity. See column 15, lines 22-26. As Michl includes no teaching of a spatial optical modulator that controllably rotates a polarization angle of a recording light. Michl cannot be said to disclose each and every element of claim 30.

Claim 30 is not anticipated by Michl. Claims 31-34 depend from claim 30, and thus, also are not anticipated by Michl. Accordingly, reconsideration and withdrawal of the rejection of claims 30-34 as anticipated by Michl are respectfully requested.

Rejection Under 35 U.S.C. §103(a)

The Office Action rejects claims 1-29 and 35-61 under 35 U.S.C. §103(a) over U.S. Patent 5,251,197 to Leube et al. ("Leube") in view of Michl. Applicants respectfully traverse the rejection.

Leube does not teach or suggest each and every feature of the rejected claims. Michl does not cure the deficiencies of Leube. Each of the claims 1-29 and 35-61 recites, in one form or another, that the polarization angle of a recording light is controlled. For example, claim 1 recites "[a]n optical recording material that changes a state of photo-induced birefringence in response to a recording light that is externally controlled from the optical recording medium to rotate a polarization angle of the recording light." Similarly, claim 22 recites "controlling a polarization angle of a recording light emitted from a light source, the recording light externally controlled from an optical recording medium to rotate the polarization angle of the recording light," and claim 46 recites "[a]n optical recording medium in which an azimuth of an optical element that acts substantially as a half-wave plate is multilevel recorded in response to a polarization angle of a recording light that is externally controlled from the optical recording medium to rotate the polarization angle of the recording light." The combination of Leube and Michl would not have rendered obvious such media, methods or apparatuses.

The Office Action concedes that Leube does not teach or suggest media, methods or apparatuses in which a recording light is externally controlled from an optical recording medium to rotate a polarization angle of the recording light. The Office Action argues, however, that Michl remedies the deficiencies of Leube by teaching a writing beam with an external polarizer. As explained above, Michl includes no such teaching. Michl teaches control of the polarization angle of incident light only in the context of a reading light, not a recording light. The claimed media, methods and apparatuses recite the control of polarization angle of a recording light. Nothing in Michl teaches or suggests such media, methods and apparatuses. For at least these reasons, Michl does not cure the deficiencies of Leube.

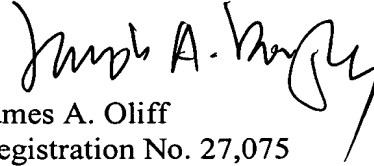
For at least these reasons, the combination of Leube and Michl does not teach, disclose or suggest each and every feature of claims 1-29 and 35-61. Thus, the combination of Leube and Michl would not have rendered obvious the subject matter of claims 1-29 and 35-61. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

#### Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-61 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Jacob A. Doughty  
Registration No. 46,671

JAO:JAD/hs

Date: February 12, 2004

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
--